

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An apparatus for transmitting signals between ~~UWB networks,~~
a central station and a plurality of picocells within a UWB network, comprising:

a signal converter for converting received optical signals from ~~another UWB networks,~~
the central station or the plurality of picocells within the UWB network into UWB signals,
transmitting said converted optical signals downstream to a first picocell, and for converting
UWB signals generated from the first picocell, ~~transmitting the converted optical signals within~~
~~a UWB network, and converting UWB signals generated from within the UWB network into~~
optical signals; and

an optical signal transmission means for transmitting one portion of ~~directing the~~
received optical signals to the signal converter and another portion of the received optical signals
to a second picocell, ~~a further UWB network.~~

2. (Currently Amended) The apparatus as claimed in claim 1, further including a first
port for receiving optical signals from the other picocells in the UWB networks and the central
station.

3. (Currently Amended) The apparatus as claimed in claim ~~2~~¹, further including a
second port for outputting the optical signals to other picocells in the UWB networks.

4. (Original) The apparatus as claimed in claim 1, wherein the optical signal
transmission means is a photocoupler.

5. (Currently Amended) An apparatus for transmitting signals between a central station and a plurality of picocells within a UWB network~~UWB networks~~, comprising:

an optical switch for transmitting one portion of~~transmitting~~ received optical signals from the central office or the plurality of picocells within the~~an other~~ UWB network to a signal converter and another portion of the received optical signals to a second picocell~~output port to further UWB networks~~, wherein the -signal converter converts the received optical signals into UWB signals, transmits said converted~~s the converted~~ optical signals downstream to a first picocell~~within a UWB network~~, and converts UWB signals generated within the first picocell~~UWB network~~ into optical signals.

6. (Original) The apparatus as claimed in claim 5, wherein the optical switch includes a controller.

7. (Original) The apparatus as claimed in claim 5, wherein the optical switch stores a predetermined identification number and transmits the received optical signal to the signal converter only when a destination identification number in the received optical signal corresponds to the predetermined identification number.

8. (Original) The apparatus as claimed in claim 5, wherein the optical switch is a passive device.

9. (Currently Amended) The apparatus as claimed in claim 8, wherein the optical switch

further includes sensors for controlling communication between each picocells in the UWB network.

10. (Currently Amended) The apparatus as claimed in claim 8, wherein the optical switch further configured for ~~includes a~~ CSMA/CA method for controlling communication between each picocell in the UWB network.